

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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C-O-N-F-I-D-E-N-T-I-A-L

50X1-HUM

COUNTRY	USSR	REPORT	
SUBJECT	Hungarian Trade Brochure	DATE DISTR.	26 April 1961
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SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

Hungarian trade brochure

50X1-HUM

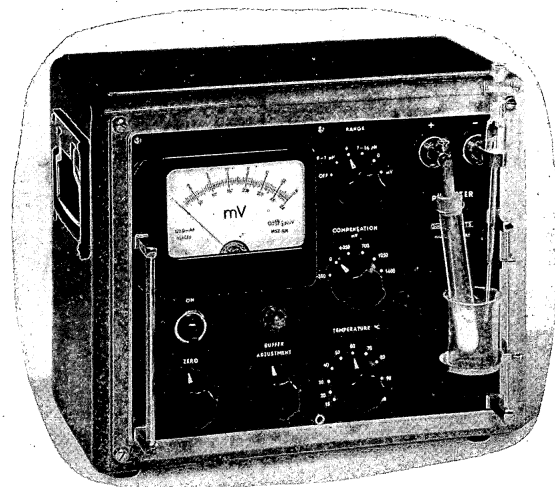
Hungary

e. PH-meter.

50X1-HUM

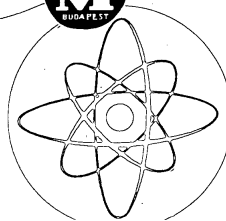
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STATE	X	ARMY	X	NAVY	X	AIR	X	NSA	X	FBI		NIC	X	OCR	X
(Note: Washington distribution indicated by "X"; Field distribution by "#".)															



pH-meter

922



METRIMPEX
HUNGARIAN TRADING COMPANY FOR INSTRUMENTS
LETTERS: BUDAPEST 62, P. O. B. 202 · TELEGRAMS: INSTRUMENT BUDAPEST

APPLICATION

The apparatus lends itself to determining the hydrogen-ion concentration by a direct reading of the pH value, as well as to low e. m. f. measurements. It can also be employed as an indicator for potentiometric titrations, for measuring redox potentials, etc.

ADVANTAGES

The pH-meter offers maximum operating safety and is greatly insensitive to mains voltage fluctuation and to other electric disturbances. It is easy to handle, settles distinctly in no time at the proper pH value and excludes measuring errors due to undefinable pointer oscillations.

DESCRIPTION

The panel of the apparatus contains the following units:

- 1. compensation voltage switch
- 2. measuring range switch
- 3. potentiometer for temperature adjustment
- 4. potentiometer for calibration
- 5. potentiometer for zero-point adjustment
- 6. instrument with 0—7 pH, 7—14 pH and 0—350 mV scales
- 7. electrodes and terminals for them
- 8. cup-holder
- 9. mains switch
- 10. pilot lamp.

Electric design: d. c. amplifier with two tubes in bridge connection. The instrument is inserted between the anodes. The test voltage is coupled to the grid of the first tube, by an RC circuit which suppresses the occasional a. c. components. The grid circuit includes an attenuation chain for compensation voltages, ranging from —350 to +1400 mV and adjustable in steps of 350 mV. The attenuation chain serves also for buffer adjustment by continuously varying the other grid potential in pH measurement or for setting a constant bias voltage during mV-measurement.

TECHNICAL DATA

Measuring range
for pH-measurement 0—7 pH and 7—14 pH
for mV-measurement —350 mV to +1750 mV, compensated in steps of 350 mV

Sensitivity 0,1 pH, or 5 mV
Accuracy ±0.1 pH, or ±5 mV
Stability at ±10% mains voltage fluctuation ±0.05 pH or ±3 mV
Grid current less than $5 \cdot 10^{-11}$ A
Power supply 110—220 V, 50 c/s
Consumption approx. 20 W
Overall dimensions 420×350×250 mm
Weight approx. 4 kg.

The right is reserved to modify the above data, if deemed necessary.